

64787-65 EWA(c)/EWT(1)/EWT(m)/EWP(i)/EWP(b)/T/EWP(w)/EWP(t) IJP(c) JD

ACCESSION NR: AP5018719

UR/0070/65/010/004/0515/0519

51
45
8

AUTHORS: Semiletov, S.A., Voronina, I.P., Kortukova, Ye.I.

44,55

44,55

44,55

TITLE: Optical properties of single-crystal films of PbS, PbSe,
and PbTe

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SOURCE: Kristallografiya, v. 10, no. 4, 1965, 515-519

TOPIC TAGS: lead compound optic material, crystal optic property,
electron diffraction analysis, refractive index, absorption coefficient

ABSTRACT: The PbS, PbSe, and PbTe samples whose optical properties
were investigated were prepared by evaporating the compounds on
cleavage planes of NaCl single crystals heated to 300--400C. The
thickness of the films was measured on an MII-r interference micro-
scope to within 0.05 μ , and varied between 1 and 10 μ . The samples
had a mirror-like smooth surface. Electron diffraction patterns

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indicated that the films were single crystals. The optical constants were found from the transmission curves obtained on a DS-301 IR spectrometer in the 2.5--10 μ range. The index of refraction was obtained from the position of the interference maxima. The absorption coefficient was determined from the transmission. At 6 μ the refractive indices were found to be: $n_{\text{PbS}} = 4.00$, $n_{\text{PbSe}} = 4.46$, and $n_{\text{PbTe}} = 5.26$. The widths of the forbidden band for the nonvertical transitions were 0.37, 0.26, and 0.29 eV respectively. An analysis of the absorption due to free carriers yielded the following effective electron masses in PbS, PbSe, and PbTe films: 0.20, 0.12, 0.10 (± 0.03) of the mass of the free electron. All the obtained results are in agreement with the known constants of the corresponding single crystals. "The authors take the opportunity to express their gratitude to G. I. Distler for making it possible to obtain the transmission curves of the films and for a discussion of a number of problems." Orig. art. has: 5 formulas, 2 tables, and 6 figures.

Card 2/3

, 64787-65

ACCESSION NR: AP5018719

ASSOCIATION: Institut kristallografii AN SSSR (Institute of Crystallography AN SSSR) 44157

SUBMITTED: 100ct64

ENCL: 00

SUB CODE: OP, SS

NR REF SOV: 003

OTHER: 006

Card 3/3

I 4272-66 EVT(1)/EWT(m)/EWP(i)/EPA(w)-2/EWP(t)/EWP(b)/EWA(m)-2 IJP(c) AT/JD
ACC NR: AP5024545 UR/0070/65/010/005/0622/0625
548.74 64
58 B

AUTHOR: Kurdyumova, R. N.; Semiletov, S. A.

TITLE: Electron diffraction study of the structure of cuprous bromide thin films

SOURCE: Kristallografiya, v. 10, no. 5, 1965, 622-625

TOPIC TAGS: copper compound, electron diffraction analysis, crystal lattice structure, crystal lattice vacancy, crystallography

ABSTRACT: The structure of thin films of the cubic γ phase of cuprous bromide was studied by electron diffraction. The samples were prepared by sublimation of a single-crystal fragment of CuBr in a vacuum onto substrates of NaCl covered with a graphite-film. Three-dimensional Fourier synthesis showed the copper atoms to be located in tetragonal and octahedral vacancies of a close-packed lattice, with about 12% of the copper atoms in the octahedral vacancies at room temperature. This may be due to a partial dissociation and reflection of bromine from the substrate during vacuum deposition. Heating of CuBr samples with a cubic structure to 120°C was invariably associated with the formation of a new modification unknown in this temperature range. Preliminary data indicate that this modification belongs to the tetragonal system with lattice constants $a = 3.02 + 0.01$ and $c = 4.24 + 0.01$ Å, space group D_{4h}^{14} ; ratio of axes $a:c = (\sqrt{2}/2) : 1$; number of molecules per unit cell $n = 1$. The tetragonal

Card 1/2

L 4272-66

ACC NR: AP5024545

phase was also obtained by subliming CuBr onto a substrate at a temperature above 120C.
It is possible that this phase exists only in thin films and forms upon condensation of vapor in
a vacuum. "The authors thank G. F. Dobrzhanskiy, who supplied the single-crystal cuprous
bromide." Orig. art. has: 3 figures and 1 table. 44,55

ASSOCIATION: Institut kristallografi AN SSSR (Institute of Crystallography, AN SSSR) 44,55

SUBMITTED: 18Jan65

ENCL: 00

SUB CODE: SS, IC

NO REF SOV: 003

OTHER: 002

Card 2/2 DP

L 63379-65 EWT(1)/EWT(m)/EWP(1)/T/EWP(t)/EWP(b)/EWA(c) IJP(c) JD

ACCESSION NR: AP5019759

UR/0051/65/019/002/0252/0254

535.321 + 535.341

37

AUTHOR: Semiletov, S. A.; Agalarzade, P. S.; Kortukova, Ye. M.

36

TITLE: Optical properties of polycrystalline InSb films

SOURCE: Optika i spektroskopiya, v. 19, no. 2, 1965, 252-254

TOPIC TAGS: indium^{44,55} antimonide^{44,55}, thin film, polycrystal, single crystal, refractive index, light dispersion

ABSTRACT: The films investigated were 0.85 to 20 μ thick and were obtained in a vacuum of $\sim 2 \times 10^{-6}$ mm Hg on single-crystal ZnS substrates by continuously feeding the powdered alloy into a heated evaporator, using a technique described elsewhere (Kristallografiya, v. 2, 298, 1963). The main purpose of the investigations was to check on the large difference observed by others between the refractive index of polycrystalline films and that of single-crystal indium antimonide. The film thickness was determined with a Linnik interference microscope accurate to $\pm 0.05 \mu$. Transmission curves were plotted for the films in the wavelength range 2.5-15 μ . The dispersion of the real part of the refractive index and the wavelength dependence of the film absorption coefficient were calculated from the transmission curves by two independent methods. The results show that the optical width

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L 63379-65

ACCESSION NR: AP5019759

of the forbidden gap of the films is 0.15 ev, the transitions of the electrons in the intrinsic absorption region are direct, and the absorption edge of the InSb films is more diffuse than that of the single crystal. This is attributed to the inhomogeneous carrier density in the produced films. No noticeable difference between the refractive index of the film and of the single crystal was observed.

"The authors thank G. I. Distler^{1,2} for making the optical measurements possible."

Orig. art. has: 3 figures and 1 table.

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[02]

ASSOCIATION: none

SUBMITTED: 11Jun64

ENCL: 00

SUB CODE: SS, OP

NO REF Sov: 003

OTHER: 003

ATD PRESS: 4079

dm
Card 2/2

L 04795-67 EWT(m)/EWP(r)/ETI IJP(c) JD

ACC NR: AP6024482

SOURCE CODE: UR/0181/66/008/007/2154/2162

AUTHOR: Mal'tsev, Yu. V.; Nensberg, Ye. D.; Petrov, A. V.; Semiletov, S. A.; Ukhanov, Yu. I.(29)
BORG: Institute of Semiconductors AN SSSR Leningrad (Institut poluprovodnikov AN SSSR
Leningrad)

TITLE: Electric and optical investigations of PbS

n - v1

SOURCE: Fizika tverdogo tela, v. 8, no. 7, 1966, 2154-2162

TOPIC TAGS: lead compound, sulfide, conduction band, valence band, Hall constant, thermoelectric power, electric conductivity, Faraday effect, temperature dependence

ABSTRACT: The PbS samples investigated had carrier densities from 10^{18} to 10^{20} cm^{-3} for n-type and 1.4×10^{18} to $4 \times 10^{19} \text{ cm}^{-3}$ for p-type, which are higher than those used in earlier investigations. Measurements were made of the Hall coefficient, the thermoelectric power, the electric conductivity, the Faraday effect, and the absorption and reflection spectra in a temperature range from 80 to 900K and in a magnetic field of 6 kOe. The crystals were grown by slowly cooling from the melt. Doping was with chlorine (n-type) or silver (p-type). Tests were also made on epitaxial films with thickness from 2 to 16 microns. The apparatus for the Hall measurements was described earlier (in: Termoelektricheskiye svoystva poluprovodnikov, Izd. AN SSSR,

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L 04795-67

ACC NR: AP6024482

27, M.-L. 1963). Plots of the temperature dependence of the thermoelectric power and of the effective masses, as well as the absorption and reflection spectra, are presented. The values obtained for the effective masses of the state density m_e (0.38 -- 0.48) and of the conductivity m_c (0.13 -- 0.32) agree with the modal of four equivalent minima in the conduction band, with $m_{cn} = m_{cp}$. The agreement is poor for the valence band. Orig. art. has: 5 figures, 4 formulas, and 2 tables

SUB CODE: 20/ SURM DATE: 23Dec65/ ORIG REF: 009/ OTH REF: 015/

Card 2/2 afs

INDENBAUM, I.S.; PERSHIN, G.N., prof., nauchnyy rukovod.; SEMILETOVA, A.,
red.; FEL'DSHEER, L., otv. za vypusk; SOYFERTIS, L., tekhn.red.

[Medicinal preparations; collection of annotations] Lekarstvennye
preparaty; sbornik annotatsii. Pod nauchn.rukovodstvom G.N.
Pershina. Sost. I.S.Indenbaum. Moskva, Kontora "Soiuzkhimfarm-
torg," 1959. 332 p. (MIRA 13:3)

1. Russia (1923- U.S.S.R.) Glavnoye upravleniye mezhrespubli-
kanskogo meditsinskogo snabzheniya i sbyta.
(DRUGS)

BODNYA, M.D.; KIREYEVA, V.V.; BARANOVSKAYA, G.M.; SEMILETKOVA, I.N.

Grinding of zinc whites in a ball mill in a solvent medium.
Lakokras. mat. i ikh prim. no.3:62-63 '61. (MIRA 14:6)

1. Tashkentskiy lakokrasochnyy zavod.
(Pigments)
(Zinc oxide)

ACC NR: AT6033841

SOURCE CODE: UR/3209/66/000/002/0084/0086

AUTHOR: Skripnik, Ye. I. (Candidate of technical sciences); Dolganov, V. I. (Engineer); Semileyskiy, A. Z. (Engineer); Fokin, N. A. (Engineer); Dyrin, V. G. (Candidate of technical sciences)

ORG: none

TITLE: Defoaming of crudes by a new method using ultrasound

SOURCE: Ukraine. Ministerstvo vysshego i srednogo spetsial'nogo obrazovaniya. Akustika i ul'trazvuk, no. 2, 1966, 84-86

TOPIC TAGS: crude petroleum, ultrasonic petroleum purification

ABSTRACT: A new method for dehydrating and desalting crudes by using ultrasound has been developed at the Kuybyshev Polytechnic Institute. The method was tested on a semi-works scale in the defoaming unit of the Radayevka Petroleum Plant. The unit, which has a capacity of 700 ton per day, and the procedure are briefly described in the source. The experiments were conducted with heavy high-sulfur Radayevka crudes which contained, on the average, 78,000 mg/l salts and 23% water. Ultrasonic defoaming was carried out as a one-step operation at 95—100C using the NChK anti-foaming agent whose consumption varied from 6 to 8 kg per ton. After ultrasonic defoaming, the crudes were allowed to settle for 24 hr at 40—45C. The ultrasonic

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ACC NR: AT6033841

defoaming accomplished 99.61—99.34% desalting and 99.00—99.57% dehydration.
Orig. art. has: 1 table.

SUB CODE: 11/ SUBM DATE: none/ ORIG REF: 002/

Card 2/2

GRENNNAUS, G.I.; DEGTYAREVA, V.T.; ANTSUPOVA, A.S.; SEMILIT, I.L.;
KOLUSHEV, I.P.

Some data on the study of Q fever in Gorkiy and Gorkiy Province;
authors' abstract. Zhur. mikrobiol. epid. i immun. 40 no.5:90
(MIRA 17:6)
My '63.

1. Iz Gor'kovskogo instituta epidemiologii i mikrobiologii,
Oblastnoy veterinarnoy laboratorii i Oblastnoy sanitarno-
epidemiologicheskoy stantsii.

L 22023-66 EWI(m)/EMP(j)/T LIP(c) GS/RM
ACC NR: AT6005938 (A) SOURCE CODE: UR/0000/63/000/000/0050/0060

AUTHORS: Shatalov, V. P.; Zhilina, R. I.; Furticheva, R. P.; Antonova, A. M.;
Popova, Ye. N.; Semilutskaya, A. A.

ORG: Laboratory for the Chemistry of High-Molecular-Weight Compounds, Voronezh State University (Laboratoriya khimii vysokomolekulyarnykh soyedineniy Voronezhskogo gosudarstvennogo universiteta); TsNIL Voronezh Plant SK im. S. M. Kirov (TsNIL voronezhskogo zavoda SK)

TITLE: Synthesis of hydroperoxides and the study of their initiating properties in the process of emulsion polymerization of mixtures of butadiene and styrene'

SOURCE: Voronezh. Universitet. Laboratoriya khimii vysokomolekulyarnykh soyedineniy. Trudy, no. 2, 1963. Monomery, khimiya i tekhnologiya SK (Monomers, chemistry, and technology of synthetic rubber), 50-60

TOPIC TAGS: butadiene, styrene, copolymerization, organic oxide, emulsion polymerization, hydrocarbon, hydroperoxide

ABSTRACT: It was the object of this investigation to synthesize a number of halogen-containing organic hydroperoxides and the hydroperoxides of cymene, methane, 1,1-diphenyl-ethane and its derivatives, and to study the initiating properties of the synthesized compounds on the copolymerization/reaction of butadiene and styrene. The various hydroperoxides were obtained by first synthesizing the corresponding hydrocarbons and then by subjecting the hydrocarbons to autocxidation. The following

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ACC NR: AT6005938

hydrocarbons and halo-hydrocarbons were synthesized: cymene, p-methane, 1,1-diphenylmethane, 1-phenyl-1-ethylphenylethane, 1-phenyl-1-cumene-ethane, chlorocumene, isopropylchlorocumene, bromocumene, isopropylbromocumene, and fluorocumene. The reaction yields and the characteristic physical constants for the synthesized compounds are tabulated. The initiating properties of the hydroperoxides in the copolymerization reaction of butadiene and styrene were studied in the presence of two redox systems: a) trilon B-rongalite-ferrous sulfate-hydroperoxide, and b) hydroquinone-sodium sulfite-ammonia-hydroperoxide. A 70% solution of Nekal and potassium soap of synthetic fatty acids or a mixture of potassium and sodium soaps of hydrated rosin and synthetic fatty acids ($C_{10} - C_{16}$) served as emulsifier. The experimental results are tabulated. It is concluded that the more active hydroperoxides produce the hardest rubbers which, when vulcanized, yield vulcanizates of high strength. *15 4456*
Orig. art. has: 3 tables.

SUB CODE: 07/ SUBM DATE: none/ ORIG REF: 016/ OTH REF: 001

Card 2/2 *dtl*

ANDREYEV, Yu.P.; SEMIOKHIN, I.A.; PANCHENKOV, G.M.

Kinetics of carbon dioxide dissociation with additions in a
silent electric discharge. Vest. Mosk. un. Ser. 2: Khim. 20
no.6:24-29 N-D '65. (MIRA 19:1)

1. Kafedra fizicheskoy khimii Moskovskogo universiteta. Submitted
Aug. 1, 1964.

SEMIOKHIN, I.A.; ANDREYEV, Yu.P.; PANCHENKOV, G.M.; BAYRAMOV, V.T.

Dissociation kinetics of carbon dioxide in the silent electrical
discharge under gas circulation conditions. Zhur. fiz. khim. 39
no. 1:190-194 Ja '65 (MIRA 1965)

1. Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova.
Submitted January 7, 1964.

SEMIOKHIN, I.A.; ANDREYEV, Yu.P.; PANCHENKOV, G.M.

Oxidation of carbon monoxide in a silent electric discharge.
Zhur. fiz. khim. 39 no.9:2245-2251. S '65. (MIRA 18:10)

1. Khimicheskiy fakul'tet, Moskovskiy gosudarstvennyy uni-
versitet imeni M.V. Lomonosova.

SEMIN, A., kinooperator, laureat Stalinskoy premii.

"Albania." New color documentary film. Kinomekhanik no. 4:46-48 Ap '53.
(MLRA 6:6)

(Moving pictures, Documentary) (Albania--Description and travel)

SEMIN,A.N., kandidat tekhnicheskikh nauk

New method of mechanizing coal supply to locomotives. Tekh.zhel.dor.
7 no.7:25-26 J1'48.

(MLRA 8:11)

(Locomotives)

SEMIN,A.; SADENKO,V.; PROSYANKIN,P. (g.Ryazan')

Planning and calculating trolley bus passenger transportation. Zhil.-
kom.khoz.5 no.5:29 '55. (MLRA 8:11)
(Trolley buses)

SEMIN, Aleksandr Nikitovich; SALENKO, S.V., inzhener redaktor; BOBROVA,
Ye.N., tekhnicheskij redaktor.

[Storing coal in railroad fuel depots] Khranenie uglei na
zheleznodorozhnykh skladakh topliva. Moskva, Gos. transp.zhel-
dor.izd-vo, 1957. 50 p. (Moscow. Vsesoiuznyi nauchno-issledovatel'-
skii institut zheleznodorozhnogo transporta. Trudy, no.133) (MLRA 10:4)
(Coal)

SEMIN A. N.

CHESTNYY, M.G., inzhener-ekonomist; SEMIN, A.; SADENKO V.

Calculating unit for determining the cost of the city passenger transport, Gor. khoz. Mosk. 31 no.2:31-33 F '57. (MIRA 10:4)

1. Direktor upravleniya trolleybusa goroda Ryazani (for Semin). 2. Nachal'nik sluzhby dvizheniya (for Sadenko).
(Local transit--Cost of operation)

SEMIN, A.N., kand.tekhn.nauk; KAMENEV, N.N., inzh.

Operation of centrifugal sand-feeding units in conveying sand
over longer distances. Vest. TSNII MPS[17] no.3:55-57 My '58.
(MIRA 11:6)

(Sand) (Locomotives)

SEMIN, A. N., kand.tekhn.nauk; KAMENEV, N.N., inzh.

Washing locomotives and motorcar sections. Vest.TSNII MPS 18
no.4:59-61 Je '59. (MIRA 12:10)

(Locomotives--Maintenance and repair)
(Railroad motorcars--Maintenance and repair)

DROZDOV, N.A.; SEMIN, A.N.; FEDOTOV, I.I.; BARANCHYEV, S.S.; KAMENEV, N.N.

[Location and automation of supply systems on railroads with diesel
and electric traction] Razmeshchenie i avtomatizatsiya ekspirovochnykh
ustroistv pri elektrovoznoi i teplovoznoi tiage. Moskva, Vses.izd-ko
poligr. ob"edinenie m-va putei soob., 1960. 73 p. (Moscow. Vsesoiuznyi
nauchno-issledovatel'skii institut zheleznodorozhnogo transporta.
(MIRA 13:9)
Trudy, no.199).
(Railroads--Equipment and supplies)

SEMIN, A.; SADENKO, V.

Among the leading workers in the competition. Zhil.-kom. khoz. 10
(MIRA 13:11)
no.11:14-15 '60.

1. Direktor Upravleniya ryazanskogo trolleybusnogo khozyaystva (for
Semin). 2. Nachal'nik planovo-proizvodstvennogo otdela Ryazanskogo
trolleybusnogo khozyaystva; sekretar' partbyuro (g.Ryazan) (for
Sadenko).
(Ryazan--Trolley buses)

SEMIN, A.

Fight for the introduction of innovations. NTO 4 no.10:10-11
O '62. (MIRA 15:9)

1. Spetsial'nyy korrespondent zhurnala "Nauchno-tehnicheskiye
obshchestva SSSR". (Pipelines—Technological innovations)

SEMIN, A.N., kand.tekhn.nauk

Automatic sand plant. Elek. i tepl.tiaga 6 no.8:13-15 Ag '62.
(MIRA 17:3)

SEMIN, A.P.

Simultaenous firing of holes in coal and minerals. Bezop. truda v
prom. 3 no.7:31-32 Jl '59. (MIRA 12:11)

1. Nachal'nik Makeyevskoy rayonnoy gornotekhnicheskoy inspeksi.
(Makeyevka—Coal mines and mining)

SEMIN, A.P. inzh.

Lighten the equipment of a blaster. Bezop.truda v prom. 3
(MIRA 13:4)

no.12:21 D '50

1. Nachal'nik Maryevskoy rayonnoy gornotekhnicheskoy
inspeksii.
(Blasting)

SEMIN, A.P., inzh.

Burning of explosives in blast holes. Bezop.truda v
prom. 4 no.7:10 Jl '60. (MIRA 13:8)

1. Nachal'nik Makeyevskoy rayonnoy gornotekhnicheskoy
inspeksii.
(Blasting--Safety measures)

SEMIN, A.P.

A year's work under the new system. Bezop. truda v prom. 5
no. 2:27-28 F '61. (MIRA 14:2)

1. Nachal'nik Makeyevskoy rayonnoy gornotekhnicheskoy inspektsii.
(Makeevka--Mine inspection)

SEMIN, A.P., inzh.; CONCHARENKO, A.T., inzh.

Bent bar for undercutting the upper pile of coal and the false roof in stopes. Bezop. truda v prom. 8 no.11:52 N '64.
(MIRA 18:2)

~~KOPYTIN, B. M:SEMIN, A. V.~~

KOPYTIN, B. M:SEMIN, A. V.
Microtome for preparations of sections for manometric examinations. Arkh. pat., Moskva 12 no. 5:91-93 Sept.Oct. 1950.(CLML 20:1)
1. Of the Department of Pathological Physiology (Head -- Prof. A. M. Charnyy), Central Institute for the Advanced Training of Physicians.

SEMIN, B.A.

Cold bend tests. Zav. lab. 22 no. 9:1098-1099 '56.

(MLRA 9:12)

1. Vorkutinskiy mekhanicheskiy zavod kombinata "Vorkutugol",
(Metals--Testing)

BYLLO, G.I., inzh.; KORASIN, M.Ye., inzh.; KRONFEL'D, B.D., inzh.;
SEMIN, D.P., inzh.; STARODUBTSEVA, M.S., inzh., otv. za
vyp.; KOROTKIY, I.A., tekhn. red.

[Technical information; production on movable stands of
prestressed reinforced-concrete beams, transportable in
one piece, with a span of 33.5 m. for railroad loads]
Tekhnicheskaiia informatsiia; izgotovlenie na podvizhnykh
stendakh tsel'noperevozimykh zhelezobetonnykh predvari-
tel'no napriazhennykh balok proletnykh stroenii proletom
33,5 m. pod zheleznodorozhnuiu nagruzku (Opyt Mostootriada-
10 ordena Lenina Mostotresta). Moskva, Orgtransstroi,
1963. 20 p.
(Prestressed concrete construction) (MIRA 16:11)
(Beams and girders)

S/029/62/000/005/003/003
D045/D114

AUTHOR: Semin, E., Engineer

TITLE: A bladeless turbine

PERIODICAL: Tekhnika molodezhi, no.5, 1962, 10

TEXT: In connection with demands for high-temperature materials in turbine-construction, the possible use of Tesla's bladeless turbine is discussed. It is stated that possibilities exist for making ceramic materials capable of withstanding the gas temperatures of almost 3000°C necessary for making the use of such a turbine economical. At present, bladeless gas turbines can be used for driving electric generators feeding the network on board space vehicles. The author concludes that in time Tesla's turbine will find wide application in power engineering. There is 1 figure.

Card 1/1

SEMIN, G., gvardii polkovnik; LEL'CHITSKIY, S., gvardii mayor

Practical military competitions; these are possible for every unit. Voen. vest. 40 no.11:107-108 N '60. (MIRA 14:11)
(Military education)

©

L 41185-65 EWT(d)/EWT(m)/EWA(d)/EWP(v)/EWP(t)/EWP(k)/EWP(h)/EWP(b)/EWP(l)
ACCESSION NR: AP5003729 Pf-4 JD S/0286/65/000/001/0075/0075 21

AUTHOR: Semin, G. G.; Kravchenko, V. L. 3

TITLE: Method of electroerosion machining deep precision holes.
Class 49, No. 167424 4

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 1, 1965, 75

TOPIC TAGS: electroerosion machining, electric discharge machining,
electric discharge hole drilling, precision drilling 14

ABSTRACT: This Author Certificate introduces a method for electro-
erosion drilling deep precision holes in current-conducting materials
with a tool-electrode which oscillates perpendicularly to the direc-
tion of the basic motion. In order to prevent the breakdown of the
machined article or tool-electrode, the oscillation is controlled by
an automatic system which maintains a predetermined electrode gap.
Orig. art. has: 1 figure. [AZ]

ASSOCIATION: none

Submitted: 3 APR 63

Card 1/2

ROSSEYKIN, Boris Mikhaylovich; SEMIN, Georgiy Ivanovich; CHEBANYUK,
Zakhar Fedorovich; YARMISH, Yu.F., red.; FISENKO, A.T.,
tekhn.red.

[Sevastopol; guidebook-manual] Sevastopol'; putevoditel'-
spravochnik. Simferopol', Krymizdat, 1959. 119 p.

(MIRA 13:1)

(Sevastopol--Guidebooks)

ROSSEYKIN, Boris Mikhaylovich; SEMIN, Georgiy Ivanovich; CHEBANYUK, Zakhar Fedorovich; YARMSH, Yu.F., red.; FISENKO, A.T., tekhn. red.

[Sevastopol; guidebook-manual] Sevastopol'; putevoditel'-spravochnik. Simferopol', Krymizdat, 1961. 128 p. (MIRA 14:8)
(Sevastopol—Guidebook)

AUTHORS: Fedin, E.I. and Semin, G.K.

SOV/109-4-1-17/30

TITLE: A Nuclear Quadrupole Radio-spectrometer (Yadernyy kvadrupol'nyy radiospektrometr)

PERIODICAL: Radiotekhnika i Elektronika, 1959, Vol 4, Nr 1,
pp 127 - 128 (USSR)

ABSTRACT: The authors tried to devise an equipment for determining the quadrupole resonance, such that it could be constructed by using the standard available elements. It was finally found that satisfactory results could be obtained by employing a quadrupole radio-spectrometer of the type shown in the block schematic of Figure 1. In this, the investigated substance was situated in a brass container at the end of a coaxial line. The container housed the coil of the oscillator tank; a Hopkins-type oscillator-detector (Refs 1 and 2) was employed as the source of the radio-frequency energy and the detector of the nuclear signal. The variable capacitors of the tank circuit were such as to permit the coverage of a range from 25 to 37 Mc/s, while using the same coil. The anode circuit was supplied from a battery, while the heater was fed from an accumulator. In order to obtain an oscillo-

Card 1/3

A Nuclear Quadrupole Radio-spectrometer

SOV/109-4-1-17/30

graphic display of the signal, the frequency of the tank circuit was varied by means of an electrodynamic vibrating capacitor (type RV-1); this type of modulator resulted in a high resolving power of the spectrometer; this was of the order of 10^{-6} , which was better than the minimum required in the experiment. The equipment was used for many months and proved successful in operation.

An oscillogram of the signal and noise for the absorption line of Cl³⁵ in sodium chlorate is shown in Figure 2. The work described in this paper represents only the first stage of the investigations which are being carried out under the leadership of Professor A.I. Kitaygorodskiy in the Laboratory of X-ray Analysis of the INEOS of the Soviet Academy of Sciences.

There are 2 figures and 2 English references.

Card 2/3

SEMIN, G.K.; FEDIN, E.I.

Applications of nuclear quadrupole resonance to crystallochemical investigations. Zhur. struk. khim. 1 no.2:252-267 Jl-Ag '60.
(MIRA 13:9)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.
(Crystals—Spectra)

FEDIN, E.I.; SEMIN, G.K.

Application of nuclear quadrupole resonance to crystallochemical investigations. Zhur. strukt. khim. 1 no.4:464-499 N-D '60.
(MIRA 14:2)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.
(Crystals) (Nuclear magnetic resonance)

SEMIN, G.K.

Nuclear quadrupole resonance in some bromine and iodine compounds.
Zhur.strukt.khim. 2 no.3:370-373 My-Je '61. (NIRA 15:1)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.
(Bromine compounds--Spectra) (Iodine compounds--Spectra)
(Nuclear magnetic resonance and relaxation)

S/058/61/000/010/054/100
A001/A101

AUTHOR: Semin, G.K.

TITLE: Observation of nuclear quadrupole resonance in isotopes of bromine and iodine

PERIODICAL: Referativnyy zhurnal, Fizika, no. 10, 1961, 166, abstract 10V374 (V sb. "Paramagnitn. rezonans", Kazan', Kazansk. un-t, 1960, 164-166)

TEXT: An oscillator-detector is described which is used for observation of nuclear quadrupole resonance in the frequency range of bromine and iodine. The oscillator is constructed on the tuned line, $\lambda/4$ long (λ is wavelength) with an attached end of $\lambda/8$ length which is terminated with the coil with a specimen being investigated. The range of oscillator frequencies is from 112 to 300 Mc. The following spectra of nuclear quadrupole resonance were observed: Br⁸¹ and Br⁷⁹ in n-BrC₆H₄OH; n-BrC₆H₄NH₂ and NaBrO₃ and spectrum of I¹²⁷ in HIO₃. The signal-to-noise ratio on the oscilloscope screen was ~10 at the specimen volume being 0.2 cm³.

N. Pomerantsev ✓

[Abstracter's note: Complete translation]

Card 1/1

L 17838-65 EWT(1)/EEC(t) Peb IJP(c)/SSD(a)/AEDC(b)
ACCESSION NR: AP5000259 S/0030/64/000/011/0040/0013

AUTHORS: Pavlov, B. N.; Safin, I. A.; Semin, G. K.; Fedin, B. I.; Shtern, D. Ya.

TITLE: Pulse method for investigating nuclear quadrupole resonance

SOURCE: AN SSSR. Vestnik, no. 11, 1964, 40-43

TOPIC TAGS: nuclear quadrupole resonance, spectrometer

ABSTRACT: The advantages of pulse methods for investigating nuclear quadrupole resonance (NQR) over steady-state methods are discussed. Steady-state methods can be used successfully only for samples with very perfect crystal structure. In these cases the equivalent Q of the line $Q_{eq} = \frac{\nu}{\Delta\nu} \sim 10^4$, where ν_0 is the NQR frequency and $\Delta\nu$ is the line width. Broadening of the NQR line, caused by disorder in the crystal structure which is often unremovable, leads not only to a decrease in signal amplitude but also to a decrease in sensitivity. The latter is caused by spurious effects with the strong modulations of frequency and magnetic field which are required. As a result, steady-state methods are useless when $Q_{eq} \leq 10^3$. However, the sensitivity of a pulse spectrometer remains practically

Card 1/3

L 17838-65

ACCESSION NR: AP5000259

constant with line width, since the initial amplitude of the nuclear induction signal and the maximum amplitude of the quadrupole spin echo signal are proportional to the integral NQR signal intensity and are only slightly dependent on the line width. It has been shown that the gain in sensitivity of the pulse method over the steady-state method is

$$4\pi \sqrt{\frac{T_1}{T_2} \frac{\Delta\nu_{ss}}{\Delta\nu_p} \frac{F_{ss}}{F_p}},$$

where T_1 is the spin-lattice relaxation time, T_2^* is the parameter of the NQR line width, $\Delta\nu_{ss}$ is the pass band of the steady-state spectrometer amplifier, $\Delta\nu_p$ is the pass band of the pulse spectrometer receiver, and F_{ss} and F_p are the respective receiver noise factors. As an example of the gain in sensitivity, the quadrupole echo signal from the As⁷⁵ nuclei in As₂S₃ is shown. This signal is unobserved when using the steady-state method. Several examples are also given which show that frequency measurements and resolution using the pulse spectrometer are as good as those obtained by using the steady-state spectrometer. Orig. art. has: 4 equations and 1 diagram.

Card 2/3

L 17838-65

ACCESSION NR: AP5000259

2

ASSOCIATION: Institut radioelektroniki, Kazanskiy fiziko-tehnicheskiy institut
(Radioelectronics Institute, Kazan Institute of Physics and Technology); Institut
elementoorganicheskikh soyedineniy, Akademii nauk SSSR (Institute of Organic
Compounds, Academy of Sciences SSSR)

SUBMITTED: 00

ENCL: 00

SUB CODE: NP, SS

NO REF SOV: 000

OTHER: 000

Card 3/3

KHOTSYANOVA, T.L.; ROBAS, V.I.; SEMIN, G.K.

Molecular crystals with the elements of disorder in their
structure. Crystalline structure and nuclear quadrupole
resonance spectra of pentabromofluorobenzene and pentachloro-
fluorobenzene. Zhur. strukt. khim. 5 no.4:644-646 Ag '64.
(MIRA 18:3)

l. Institut elementoorganicheskikh soyedineniy AN SSSR.

SEMIN, G.K.; ROBAS, V.I.; KOBrina, L.S.; YAKOBSON, G.G.

Nuclear quadrupole resonance spectra of Cl³⁵ and Br⁷⁹ of halo derivatives of benzene of the C₆X₅Y types. Zhur. strukt. khim. 5 no.6:915-918 N-D '64. (MIRA 18:4)

1. Institut elementoorganicheskikh soyedineniy AN SSSR i Institut organicheskoy khimii Sibirskogo otdeleniya AN SSSR.

PAVLOV, B N.; SAFIN, I.A.; SEMIN, G.K.; FEDIN, E.I.; SHTERN, D.Ya.

Pulse method of nuclear quadrupole resonance study. Vest. AN
SSSR 34 no.11:40-43 N '64. (MIRA 17:12)

1. Kazanskiy fiziko-tehnicheskiy institut i Institut elemento-
organicheskikh soyedineniy AN SSSR.

SEMIN, G.K.

Induction transmission of influence along the carbon chain as manifested in nuclear quadrupole resonance spectra (empirical scheme for calculating the nuclear quadrupole resonance frequencies of Br⁷⁹ and Cl³⁵ in aliphatic molecules). Dokl. AN SSSR 158 no. 5:1169-1171 O '64.
(MIRA 17:10)

1. Institut elementoorganicheskikh soyedineniy AN SSSR. Predstavлено академиком M.I. Kabachnikom.

I 55916-65 EWT(l)/EWT(m)/EPF(c)/EWP(j)/EEC(t)/T Pg-4/Pr-4/Pi-4 IJP c)
WW/GG/RM UR/0020/64/159/001/0164/0165
ACCESSION NR: AP5018335

AUTHOR: Babushkina, T. A.; Robas, V. I.; Semin, G. K.

42

41

3

TITLE: Nuclear quadrupole resonance in polymers

SOURCE: AN SSSR. Doklady, v. 159, no. 1, 1964, 164-165

TOPIC TAGS: polymer, crystal structure, nuclear resonance

ABSTRACT: A formula proposed by G. K. Semin was used to calculate the nuclear quadrupole resonance frequencies of Cl³⁵ in chlorine-containing chain polymers (e.g. polyvinylidene chloride). The same formulas were also used to determine the structure of the polymer fragment of the polymerization product of trichloropropene (Cl₃C-CH=CH₂). The authors suggest that a study of the shape of the lines, relaxation times, and their temperature variations will provide the possibility of drawing conclusions on the nature and degree of order of polymer crystals, as well as the forms of thermal motions of polymer molecules.

Orig. art. has: 6 formulas.

Card 1/2

L 55916-65

ACCESSION NR: AP5018335

ASSOCIATION: Institut elementoorganicheskikh soyedineniy Akademii nauk SSSR
(Institute of Heteroorganic Compounds, Academy of Sciences SSSR)

SUBMITTED: 09Jan64

ENCL: 00

SUB CODE: NF, OC

NR REF Sov: 001

OTHER: 000

JPRS

An
Card 2/2

SEMIN, G.K.; FAYNZIL'BERG, A.A.

Nuclear quadrupole resonance of Cl³⁵ and Br⁷⁹ in halonitroalkanes.
Zhur. strukt. khim. 6 no.2:213-217 Mr-Ap '65. (MIRA 18:7)

1. Institut elementoorganicheskikh soyedineniy AN SSSR i Institut
organicheskoy khimii imeni Zelinskogo AN SSSR.

SEMIN, G.K.; ROBAS, V.I.; STANKO, V.I.; BRATTSEV, V.A.

Nuclear quadrupole resonance spectra of Cl³⁵ and Br⁷⁹ in halo derivatives
of the barene series. Zhur. strukt. khim. 6 no.2:305-307 Mr-Ap '65.
(MIRA 18:7)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.

L 45201-65 EPF(c)/EEG(t)/EWT(l) PI-4 IJP(c) GG/MM
ACCESSION NR: AP5006911

S/0101/65/007/003/0924/0925

AUTHOR: Babushkina, T. A.; Robas, V. I.; Safin, I. A.; Semin, G. K.

TITLE: Investigation of the features of phase transitions in the molecular crystal
 $\text{Cl}_2\text{C}(\text{NO}_2)_2$ by the method of nuclear quadrupole resonance

SOURCE: Fizika tverdogo tela, v. 7, no. 3, 1965, 924-925

TOPIC TAGS: nuclear quadrupole resonance, molecular crystal, phase transition,
relaxation time, frequency shift

ABSTRACT: An investigation of the NQR spectrum of Cl^{35} in the molecular crystal
 $\text{Cl}_2\text{C}(\text{NO}_2)_2$ has established the existence of slow phase transitions, making it pos-
sible to measure the NQR frequencies and the spin-lattice relaxation times for all
phases at liquid nitrogen temperature. Three crystallographically different phases
were observed to form in succession during the course of the experiment. The NQR
frequencies, the widths of the resonance lines, and the relaxation times are listed
in a table. A pronounced dependence of the shift of NQR frequency of different
phases on the spin-lattice relaxation time is observed at 77K. The change in the
width of the resonance lines in transitions between phases is ascribed to differ-

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L 45201-65
ACCESSION NR: AP5006911

ence in thermal vibrations of the molecules of the crystal in the lattices of the corresponding phases. "The authors thank A. I. Kitaygorodskiy and B. M. Kozyr'eva for interest in the work and A. A. Faynzil'berg for supplying the sample of $\text{Cl}_2\text{C}(\text{NO}_2)_2$." orig. art. has: 1 table.

ASSOCIATION: Kazanskiy fiziko-tehnicheskij institut AN SSSR (Kazan' Physico-technical Institute, AN SSSR)

SUBMITTED: 09Oct64

ENCL: 00

SUB CODE: SS, MP

NR REF Sov: 000

OTHER: 000

D-23
Card 2/2

SEMIN, G.K.; ROBAS, V.I.; SHTEYNGARTS, V.D.; YAKOBSON, G.G.

Nuclear quadrupole resonance spectra of Cl³⁵ of poly-
fluorochlorobenzene molecular compounds. Zhur. strukt.
khim. 6 no.1:160-161 Ja-F '65.

(MIRA 18:12)

1. Institut elementoorganicheskikh soyedineniy AN SSSR i
Institut organicheskoy khimii Sibirskogo otdeleniya AN SSSR,
Novosibirsk. Submitted June 10, 1964.

TSYBROV, V. N.; KMIN, G. A.; LUBENOV, D. I.; FEDOCHNIK, M. I., akad-sik

Correlation of the dissociation constants of carboxylic acids
RCOOH and Taft's σ -constants with the nuclear quadrupole resonance
frequencies of halogens in RHal-type compounds. Dokl. AN SSSR 161
no. 5t1102-1105 Ap '65. (MIRA 18:5)

I. Institut elementoorganicheskikh sovedyenii AN SSSR.

MYASNIKOVA, P.M.; ROBAS, V.I.; SEMEN, G.K.

Particular features of the structure of β -chloronaphthalene crystals.
Zhur. struk. khim. 6 no.3:474-475 My-Je '65.

(MIRA 18:8)

1. Institut elementoorganicheskikh soyedimeniy AN SSSR.

L 8148-66

ACC NR: AP5027696

SOURCE CODE: UR/0062/65/000/010/1913/1914

AUTHOR: Zakharkin, L. I.; Okhlobystin, O. Yu.; Semin, G. K.;
Babushkina, T. A.ORG: Institute of Organometallic Compounds, Academy of Sciences SSSR
(Institut elementoorganicheskikh soyedineniy, Akademii nauk SSSR)TITLE: Exchange of hydrogen for chlorine in the barene- CCl_4 or - CHCl_3 system by the action of aluminum chlorideSOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 10, 1965,
1913-1914TOPIC TAGS: organoboron compound, chemical reaction, halogenation,
exchange reaction, chlorinated organic compound

ABSTRACT: When a solution of barene in carbon tetrachloride or chloroform was boiled in the presence of aluminum trichloride, the hydrogen atoms of the barene were readily substituted by chlorine atoms to form mono-, di- and trichlorobarenes. Similar exchange of hydrogen for chlorine occurred in vinylbarene and methylbarene. Probable mechanism for these exchanges is discussed. Orig. art. has: 2 equations.

SUB CODE: OC/ SUBM DATE: 21Jul65/ ORIG REF: 001/ OTH REF: 002

nw
Card 1/1

UDC: 541.124+661.718.4

0901 0250

39155
S/120/62/000/003/019/048
E192/E382

9,3280

AUTHORS: Predein, B.A., Gorbachev, V.M., Sem'in, G.N.,
Uvarov, N.A., Filimonchev, M.I. and Shevtsov, V.A.

TITLE: A wideband pulse amplifier

PERIODICAL: Pribory i tekhnika eksperimenta, no. 3, 1962,
34 - 86

TEXT: The amplifier consists of three stages of distributed amplification, each consisting of 4 tubes. The output and middle stages are based on secondary emission tubes, type 6E17 (6V1P). It is possible (by employing these tubes) to obtain a symmetrical output and high output voltages. However, since the tube 6V1P is nonlinear at small signals, the input stage is based on tubes, type 6Zh22 (6Zh22P), whose input capacitance is almost identical with that of 6V1P, so that identical lines could be employed in all grid circuits. The distributed loads of the amplifier stages are in the form of lumped delay lines based on m-derived filters, the wave impedance of the anode, dynode and grid lines being 150Ω . The bandwidth of the amplifier is about 150 Mc/s per stage, which

Card 1/2

A wideband pulse amplifier

S/120/62/000/003/019/048
E192/E582

corresponds to a rise time of about 3×10^{-9} sec. The output of the amplifier is applied to the plates of an oscilloscope by means of a cable, type PK-50 (RK-50), about 1 m long. The amplification of the system at the anode output is about 240 and at the dynode it is about 160, the symmetrical output giving a gain of 400. The maximum amplifier output at the anode is 140 V and at the dynode - 80 V. The longest pulses applied should not exceed 3 μ s in order to avoid the fatigue effects in the secondary emission tubes. The authors express their gratitude to I.M. Cherednichenko for discussing the results and to A.V. Filatov and B.F. Krest'yaninov for preparing the experimental models of the device. There are 3 figures.

SUBMITTED: December 2, 1961

Card 2/2

PREDEIN, B.A.; GORBACHEV, V.M.; SEM'IN, G.N.; UVAROV, N.A.; FILIMONCHEV, M.I.;
SHEVTSOV, V.A.

Wide-band pulse amplifier. Prib. i tekhn. eksp. 7 no.3:84-86
My-Je '62. (MIRA 16:7)
(Amplifiers, Electron-tube)

SEMIN, I.V.

DESYATKOV, Mikhail Ivanovich; SEMIN, Ivan Dmitriyevich [deceased];
BRUNELLER, G.A., retsenzant; YERMAKOV, S.F., redaktor; LOBANOV, Ye.M.,
redaktor; KRASNAYA, A.K., tekhnicheskiy redaktor

[Handbook for the establishment of work norms in machine shops;
small series and unit production] Spravochnik normirovshchika
mekhanicheskogo tsekha; melkoseriinoe i edinichnoe proizvodstvo.
Moskva, Izd-vo "Morskoi transport," Pt.1. [Turning and facing]
Tokarnye i rastochnye raboty. 1955. 430 p. [Microfilm] (MLRA 8:2)
(Machine-shop practice)

SEMIN, I. P.

EPP.
.C51820

KUNG-YEH CHUNG TA-CHUAN-PIEN TI I-NIEN (A YEAR OF MAJOR INDUSTRIAL TRANS-FORMATION) PEIPING, JEN-MIN CH'U-PAN-SHE, 1956. 111 p. GRAPH, TABLES. PUBLISHED IN RUSSIA, 1954, UNDER TITLE: GOD VELIKOGO PERELOMA V PROMYSHLENNOSTI. TRANSLATED BY HSIAO MING. AB523048

SEMIN, I. P.

SEMIN, I. P.: "On the problem of increasing the effectiveness
of mobile, loaded automatic brakes on railroads". Novosibirsk,
1955. Min Railways USSR. Moscow Order of Lenin and Order of
Labor Red Banner Inst of Railroad Transport Engineers imeni I. V.
Stalin. (Dissertations for the Degree of Candidate of Technical
Sciences)

BO: Knizhnaya letopis', No. 52, 24 December, 1955. Moscow.

SEMIN, I.P., kand.tekhn.nauk

Time spent for the preparation of brakes for action. Trudy NILLZET
no.33:204-208 '63. (MIRA 17:3)

SOV/112-59-2-3600

32(3)

Translation from: Referativnyy zhurnal. Elektrotehnika, 1959, Nr 2, p 195 (USSR)

AUTHOR: Mel'nik, A. L., and Semin, K. F.

TITLE: Mechanization of Ticketing-Machine Operation on Italian Railroads
(Mekhanizatsiya raboty biletnykh kass na zheleznykh dorogakh Italii)

PERIODICAL: Byul. tekhn.-ekon. inform. M-vo putey soobshch. SSSR, Nauchno-
tekhn. o-vo zh.-d. transp., 1958, Nr 11-12, pp 110-113

ABSTRACT: Many ticket offices at Italian railroad stations are equipped with computing and ticket-printing machines that permit mechanizing all or part of the operations involved in selling tickets. Some machines are intended only for ticket punching, for indicating the car class, tariff, the price paid, and for counting receipts. The machines are electrically driven; on a power interruption, the printing can be done manually. Among these types of machines, the cash register described in the article has received wide usage; it is intended for counting the tickets sold and the receipts. Ticket-printing

Card 1/2

SCOV/112-59-2-3600

Mechanization of Ticketing-Machine Operation on Italian Railroads

machines with 250 and 500 plates are operated at large railroad stations. A better machine prints tickets from 1,000 plates; ticket-printing machines with 250, 500, and 1,500 plates are manufactured for special cases. Simultaneously with the printing, the mechanism performs accounting operations and totals the receipts. The average time of printing a ticket is 4 sec or, considering the time used in handing change to the passenger, 10 sec. Five illustrations.

T.I.L.

Card 2/2

SEMIN, K.F., inzh.; SHCHERBAKOV, B.D., inzh.; ZAYTSEV, B.P., inzh.,
retsenzent; ASHUKIN, D.D., kand. tekhn. nauk, retsenzent;
PETROVA, V.L., inzh., red.; DROZDCVA, N.D., tekhn. red.

[Mechanization and automation of ticket office operations in
stations] Mekhanizatsiia i avtomatizatsiia biletno-kassovykh
operatsii na vokzalakh. Moskva, Transzheldorizdat, 1963. 51 p.
(MIRA 16:12)

(Railroads—Station service) (Automation)

SEMIN, K. I., inzh.

Constructing buildings without skylights in the United
Arab Republic. Prom.stroi. 38 no.6:61-63 '60.
(MIRA 13:7)
(Egypt--Factories--Design and construction)

SEMIN, L.S., inzh.-zemleustroitel'

Classification of state land resources in the U.S.S.R. Zemledelie
7 no. 8:82-85 Ag '59. (MIRA 12:10)
(Land--Classification)

COUNTRY : USSR
CATEGORY : Cultivated Plants. Fruits. Berries. Nuts. Tea.
ABS. JOUR. : RZhBiol., No. 4, 1959, No. 15788 K
AUTHOR : Bemin, M.; Gill', A.S.
TYPE. TITLE : Root System of Apple Trees in Orchards of the Irkutsk Oblast.
ORIG. PUB. : S. kh. Sibiri, 1958, No. 6, 67-70
ABSTRACT : According to the observations of the Irkutsk agricultural institute, the root system of apple trees is developed superficially in local conditions and with deep cultivation is greatly damaged. With shallow loosening to depth of 4-5 cm, the overgrowing roots were well developed in the surface horizon of 0 to 10 cm and formed 20% of the total number of roots. With deep cultivation of 10 to 20 cm the overgrowing roots developed poorly in the surface horizon and formed 4% of the total number of roots. Deep

Card:

1/2

COUNTRY :
CATEGORY :
APL. JOUR. : RZhBiol., №. ., 1959, №. 15788
AUTHOR :
INST. :
TITLE :

OPIN. PUB. :

ABSTRACT , cultivation reduced the crop and drastically increased the periodicity of fruit bearing. Deep working of the soil proved useful every 4 to 5 years for rejuvenation of the root system. Intensive formation of mycorrhiza on apple tree roots was established. -- I.N. Fortunatov

Card: 2/2

141

SEMIN, N.

International socialist division of labor and foreign trade. Vnesh.
torg. 30 no.12:10-13 '60. (MIRA 13:12)
(Mutual Economic Assistance Council)
(Division of labor)

SEMIN, N.

Soviet-Czechoslovak trade on the uprising. Vnesh. torg. 41 no. 2:2-
4 '61. (MIRA 14:2)

(Russia--Commerce--Czechoslovakia)

(Czechoslovakia--Commerce--Russia)

TEMNYKH, G.; SEMIN, N.

Technical maintenance of electronic navigation instruments and the
role of radio specialists on ships. Mor. flot 25 no.8:17 Ag '65.
(MIRA 18:8)

1. Nachal'nik otdela svyazi i elektroradionavigatsii upravleniya
"Vostokrybkhodflot" (for Temnykh).

ACC NR: AP7002593

(A, N)

SOURCE CODE: UR/0413/66/000/023/0100/0101

INVENTORS: Gromyko, V. Ya.; Dobrov, N. A.; Zazulin, V. A.; Aslanyan, E. V.; Semin, N. A.

ORG: none

TITLE: An assembly for checking the efficiency of an aircraft engine. Class 42,
No. 189230 [announced by Central Institute of Aircraft Engine Construction
(Tsentral'nyy institut aviationsionnogo motorostroyeniya)]SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 23, 1966, 100-
101

TOPIC TAGS: aircraft engine, engine control system, aircraft engine instrument

ABSTRACT: This Author Certificate presents an assembly for checking the efficiency of an aircraft engine. This assembly contains gauges, gauge commutators, a voltage-to-code converter, memory units for the upper and the lower ranges, digital comparators, an electromagnetic static frequency multiplier, a directing device, a control panel, and a data output device. To increase the speed of the assembly and to lower the dynamic losses originating in converting engine revolutions into coded signals, the output coils of the tachometric gauge are connected to the three-phase coils of the static frequency multiplier. The output coils of the frequency multiplier are connected through a key to the input element of the impulse counter.

Card 1/1 SUB CODE: 01, 13/ SUBM DATE: 12Jul65/

UDC: 681.149

0930 2708

MURASHKO, V.V.; SEMIN, N.D. (Moskva)

Apparatus for the intensification of auscultatory sounds. Klin.
med. 37 no.7:135-137 Jl '59. (MIRA 12:10)

1. Iz propedevticheskoy terapevticheskoy kliniki lechebnogo
fakul'teta II Moskovskogo meditsinskogo instituta imeni N.I.
Pirogova (zav. - prof.A.A.Shelagurov).
(HEART SOUNDS)

MURASHKO, V.V.; NAMIN, N.N.

Vectorcardiogram in pulmonary heart. Radiotogia 3 no.5:47-53
(Leningrad) 1963.

I. Iz kafedry propadovtiki vnutrennikh bolezney (zav. - zasluzhennyy
deyatel' nauki prof. A.P. Chelagin) i legocanogo fakul'teta II
Moskovskogo meditsinskogo instituta imeni M.I. Virogova.

SHELAGUROV, Aleksey Alekseyevich; Prinimali uchastiye: ANDRIANOVA,
N.V.; DOBROVOL'SKAYA, T.I.; MURASHKO, V.V.; MALINOVSKAYA,
N.I.; SEMIN, N.D.; ARTEM'YEV, S.G., red.; MIRONOVA, A.M.,
tekhn. red.

[Methodology of examination in the clinic for internal
diseases] Metody issledovaniia v klinike vnutrennikh bo-
leznei. Izd.2., ispr. i dop. Moskva, Izd-vo "Meditina,"
1964. 474 p. (MIRA 17:3)

*

SEMIN, N.G.

Gas condensate content of formation VII of the Karadag deposits.
Gaz.prom.no.10:7-8 O '56. (MIRA 9:10)
(Gas, Natural)

SEMIN, N.S.

Manufacture of power machinery in Czechoslovakia. Biul. tekhn.-ekon.
inform. no. 3:82-85 '58. (MIRA 11:6)
(Czechoslovakia--Power engineering)

SEMIN, N.S.

Development of iron and steel industry in Czechoslovakia. Biul.
tekh.-ekon.inform. no.6:84-86 '58. (MIRA 11:8)
(Czechoslovakia--Iron industry) (Czechoslovakia--Steel industry)

SEMIN, N.S., referent

Soda regeneration system (from "Strojirentsvi," no. 8, 1957).
Bum. prom. 33 no. 6:27-28 Je '58. (MIRA 11:7)
(Sodium carbonate)
(Paper)

SEMIN, N.S.

Production and use of plastics in Czechoslovakia. Biul.tekh.-
ekon.inform. no.1:84-85 '59. (MIRA 12:2)
(Czechoslovakia--Plastics industry)

SEMIN, N.S.

Czechoslovakian machinery industry at the Brno Fair. Biul.
tekh.-ekon.inform. no.1:84-87 '60. (MIRA 13:5)
(Czechoslovakia--Machinery industry)
(Brno, Czechoslovakia--Fairs)

SEMIN, N.S.

Czechoslovakian machines at the Brno fair. Biul.tekh.-
ekon.inform. no.3:76-79 '60. (MIRA 13:6)
(Brno (Czechoslovakia)--Fairs)
(Czechoslovakia--Machinery industry)

SEMIN, N.S.

Specialization and cooperation in industries of European people's
democracies. Biul.tekh.-ekon.inform. no.8:73-76 '60.
(MIRA 13:9)
(Europe, Eastern—Industrial management)

SEMIN. N.S.

Development of the machinery industry in Czechoslovakia. Biul. tekh.-
ekon. inform. no.11:73-76 '60. (MIRA 13:11)
(Czechoslovakia—Machinery industry)

SEMIN, N.S.

Czecho-Slovakian machine tools at the International Machinery Fair in Brno. Biul. tekh.-ekon. inform. no. 2:66-64 '61.
(MIRA 14:2)
(Czechoslovakia--Machine tools) (Brno--Fairs)

SEMIN, P.P., inzh.

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